

REMARKS

This document responds to the Examiner's Non-Final Office Action mailed on September 14, 2010. Reconsideration in view of the foregoing response is respectfully requested.

Status of the Claims

Claims 1-13 were previously pending in the instant application. In the present response, the Applicants have amended claims 1-12, while claim 13 has been cancelled without prejudice or disclaimer. As a result, claims 1-12 are now pending in the instant application.

Drawings

The Applicant gratefully acknowledges the Examiner's acceptance of the formal drawings submitted in the previous response.

Specification

The Examiner has objected to the specification because of the grammatical informality related to the term "diskcloses". In response, the Applicant has amended paragraph 0030 to replace the terms "diskcloses" with the correctly spelled term "discloses" throughout the paragraph. Based on the foregoing amendment, the Examiner is respectfully requested to withdraw the objection to the specification.

Claim Rejection – 35 U.S.C. §112, Second Paragraph

The Examiner has rejected claim 9 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In particular, claim 9 has been rejected because the claim makes use of trademarks. In response, the Applicant has amended claim 9 to remove the references to these trademarks from the claim. As such, the Examiner is respectfully requested to withdraw the rejection of claim 9.

Claim Rejection - 35 U.S.C. §103 (Butts and Lavallee)

Claims 1-5 and 7 have been rejected under 35 USC §103(a) as being unpatentable over by U.S. Patent No. 5,812,414 to Butts et al. ("Butts") in view of U.S.

Patent No. 5,267,242 to Lavallee et al. ("Lavallee"). The Applicant respectfully traverses this rejection.

With respect to independent claim 1, the Examiner asserts that the Butts reference is directed to "... a data managing method for a removable storage device having a replaceable memory chip... [including] determining the memory chip...applying or organizing or establishing or re-establishing a file managing system for the storage medium of said removable storage device...[and] utilizing said file managing system to perform corresponding processing in said memory chip according to an operation instruction from a host system connected to said removable storage device. Although the Examiner admits that Butts fails to teach the limitation of "determining the use condition of said memory chip", the Examiner contends that the Lavallee reference teaches "determining the use condition of said memory chip."¹ The Examiner concludes that "...it would have been obvious to a person of ordinary skill in the art to add the feature of determining the use condition of a memory chip, as taught by Lavallee, to the method of Butts so that the resultant method would determine the use condition of a memory chip and configure the file system accordingly...[and that] [o]ne would have been motivated to do so in order to ... report the condition of the memory chip to the host system."²

In response, the Applicant has amended independent claim 1 to incorporate certain limitations from dependent claims 2 and 6 so as to clearly distinguish the Butts and Lavallee references cited by the Examiner. Particularly, the replaceable memory chips have been further defined to include used memory chips and/or unused memory chips with the used memory chips being chips having a file management system that are ready to be used in the removable storage device and the unused memory chips being chips that have not been initialized or partitioned. In addition, independent claim 1 has been amended to now require that the determination step include the limitation of "whether the replaceable memory chips: a) are used memory chips; or b) are unused memory chips; or c) include both used and unused memory chips." Independent claim 1

¹ See Office Action at pages 4-5.

² Id at pages 5-6.

has been further amended to recite the limitation of "a controller of the removable storage device reading an amount of the replaceable memory chips installed in the removable storage device, and obtaining information of storage capacity of each of said replaceable memory chips, and obtaining information of storage capacity of each of said replaceable memory chips." Moreover, independent claim 1 has been amended to require the limitation of "...applying or organizing or establishing or re-establishing a file managing system for the replaceable memory chips of said removable storage device based upon the file management system of the used memory chips." The Applicant avers that no new matter has been introduced into the claims by virtue of the above claim amendments.³

The Butts reference describes the design of simulators in the field of EDA (electronic design automation) field. In particular, Butts is directed to the installation of a removable daughter card in the user-supplied device module (USDM) of a simulator. However, there is no teaching or suggestion in Butts to optimize a file management system for replacement memory chips, which may be used memory chips, unused memory chips, or chips that include a combination of used and unused memory chips as presently claimed. The method of determining the USD (user-supplied device) described in Butts does not teach or suggest the claim limitation of "...determining whether the replaceable memory chips: a) are used memory chips; or b) are unused memory chips; or c) include both used and unused memory chips." In addition, Butts does not teach or suggest that the removable daughter card is a replaceable memory chip. As such, Butts fails to teach or suggest one or more claim limitations of independent claim 1.

Lavallee does not cure the defect of Butts. A review of the Lavallee reference shows a method and apparatus for substituting a spare memory chip for a malfunctioning memory chip including a method for determining the condition of the spare chips. However, this method of Lavallee does not teach or suggest the claim limitation of "...determining whether the replaceable memory chips: a) are used memory chips; or b) are unused memory chips; or c) include both used and unused memory

³ See Specification at paragraphs 025-027.

“chips” since no such distinction in memory chips is made in the Lavallee reference. Based on the foregoing, Butts and Lavallee, alone or in any combination, fail to teach or suggest at least one claim limitation of independent claim 1, and therefore the Examiner is respectfully requested to withdraw the rejection of the claim and indicate the allowance thereof. In addition, the Examiner is respectfully requested to withdraw the rejection of dependent claims 2-12 and indicate the allowance thereof by virtue of their respective dependencies from independent claim 1.

Claim Rejection - 35 U.S.C. §103 (Butts, Lavallee and Yasuda)

Claims 6, 8 and 9 have been rejected under 35 USC §103(a) as being unpatentable over Butts in view of Lavallee and further in view of U.S. Patent Application Publication No. 2004/0010654) to Yasuda et al. (“Yasuda”). The Applicant respectfully traverses this rejection.

As noted above, independent claim 1 has been amended, *inter alia*, to recite the claim limitation of “...determining whether the replaceable memory chips: a) are used memory chips; or b) are unused memory chips; or c) include both used and unused memory chips.” In the present rejection with respect to claims 6, 8 and 9, the Examiner has asserted that Butts and Lavallee discloses the limitations of independent claim 1 and cites the Yasuda reference as teaching the claim limitation of “...if there are only used memory chips then, adopting the original file managing system thereof.”⁴ However, Yasuda does not cure the defects of Butts or Lavallee in that there is no teaching or suggestion in Yasuda related to determining the types of replaceable memory chips. As such, a *prima facie* case of obviousness cannot be made since Butts in view of Lavallee and Yasuda, alone or in any combination, fail to teach or suggest all the limitations of amended claims 6, 8 and 9. Applicant respectfully requests that the Examiner withdraw the rejection of claims 6, 8 and 9 by virtue of their respective dependencies from independent claim 1 and indicate the allowance thereof.

⁴ See Office Action at Page 9.

Claim Rejection - 35 U.S.C. §103 (Butts, Lavallee and Urabe)

Claim 10 has been rejected under 35 USC §103(a) as being unpatentable over Butts in view of Lavallee and further in view of U.S. Patent No. 6,182,159 to ("Urabe"). The Applicant respectfully traverses this rejection.

As noted above, independent claim 1 has been amended to recite the claim limitation of "...determining whether the replaceable memory chips: a) are used memory chips; or b) are unused memory chips; or c) include both used and unused memory chips." In the present rejection with respect to claim 10, the Examiner has asserted that Butts and Lavallee discloses the limitations of independent claim 1 and cites the Urabe reference as teaching the claim limitation of "...reading designated address in the operation instruction, and transforming the designated address into physical address; and comparing the physical address with capacity of the memory chips, determining the corresponding memory chip, and finding corresponding storage block in the determined memory chip."⁵ However, Urabe does not cure the defects of Butts or Lavallee in that there is no teaching or suggestion in Urabe for the step of determining the type of replaceable memory chip. As such, a *prima facie* case of obviousness cannot be made since Butts in view of Lavallee and Urabe, alone or in any combination, fail to teach or suggest all the limitations of independent claim 1. Applicant respectfully requests that the Examiner withdraw the rejection of claim 10 by virtue of its respective dependency from independent claim 1 and indicate the allowance thereof.

Claim Rejection - 35 U.S.C. §103 (Butts, Lavallee and Niles)

Claim 11 has been rejected under 35 USC §103(a) as being unpatentable over Butts in view of Lavallee and further in view of U.S. Patent Application Publication No. 2006/0236064 to Niles("Niles"). The Applicant respectfully traverses this rejection.

As noted above, independent claim 1 has been amended to recite the claim limitation of "...determining whether the replaceable memory chips: a) are used memory

⁵ See Office Action at Page 11.

chips; or b) are unused memory chips; or c) include both used and unused memory chips." In the present rejection with respect to claim 11, the Examiner has asserted that Butts and Lavallee discloses the limitations of independent claim 1 and cites the Niles reference as teaching the claim limitation of "...device returns error information if the physical address exceeds the storage capacity of all memory chips of the storage device.⁶ However, Niles does not cure the defects of Butts or Lavallee in that there is no teaching or suggestion in Niles for the step of determining the type of replaceable memory chip. As such, a *prima facie* case of obviousness cannot be made as Butts in view of Lavallee and Niles, alone or in any combination, fail to teach or suggest all the limitations of independent claim 1. Applicant respectfully requests that the Examiner withdraw the rejection of claim 11 by virtue of its respective dependency from independent claim 1 and indicate the allowance thereof.

Claim Rejection - 35 U.S.C. §103 (Butts, Lavallee and Moore)

Claim 13 has been rejected under 35 USC §103(a) as being unpatentable over Butts in view of Lavallee and further in view of U.S. Patent Application Publication No. 2005/0223243 to Moore et al. ("Moore"). The Applicant respectfully traverses this rejection.

As noted above, claim 13 has been cancelled without prejudice or disclaimer, and therefore the rejection of claim 13 is deemed moot.

CONCLUSION

By the present response, the Applicants respectfully submit that the claims are in a condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' representative at (314) 622-6855 to facilitate prosecution of this application.

⁶ See Office Action at Page 12.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-1662. Allowance of all pending claims is respectfully requested.

Respectfully Submitted,

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